AMENDATORY SECTION (Amending Order 90-62, filed 6/18/91, effective 9/18/91)

WAC 173-460-010 Purpose. (1) Pursuant to chapter 70.94 RCW, Washington Clean Air Act, the purpose of this chapter is to establish the systematic control of new or modified sources emitting toxic air pollutants (TAPs) in order to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety. Toxic air pollutants include carcinogens and noncarcinogens listed in WAC 173-460-150 ((~~and 173-460-160~~)).

(2) This chapter establishes three major requirements:

(a) Best available control technology for toxics;

(b) Toxic air pollutant emission quantification;

(c) Human health and safety protection demonstration.

(3) Policy. It is the policy of ecology to reduce, avoid, or eliminate toxic air pollutants prior to their generation whenever economically and technically practicable.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. ((~~In the event of a conflict between the definitions provided in chapter 173-400 WAC and the definitions provided in this section, the definitions in this section shall govern. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings. Note: For copies of the above mentioned rule and any other rule cited in this chapter, contact the Department of Ecology, Records Section, P.O. Box 47600, Olympia, WA 98504-7600.~~)) Terms specific to this chapter are defined as follows:

(1) "Acceptable source impact analysis" means a procedure for demonstrating compliance with WAC 173-460-070 ((~~and 173-460-080~~)), that compares maximum incremental ambient air impacts with applicable acceptable source impact levels (ASIL).

(2) "Acceptable source impact level (ASIL)" means a screening concentration of a toxic air pollutant in the ((~~outdoor atmosphere in any area which does not have restricted or controlled public access that is used to evaluate the air quality impacts of a single source. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special. Concentrations for these~~

~~three types of ASILs are determined as provided in WAC 173-460-110. ASILs are listed in WAC 173-460-150 and 173-460-160.~~

~~(3) "Authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source. Ecology is the authority if an air pollution control authority has not been activated or if ecology has jurisdiction over the source pursuant to RCW 70.94.395.~~

~~(4)~~)) ambient air. The ASIL for each toxic air pollutant is listed in WAC 173-460-150.

(3) "Best available control technology for toxics (((~~T-BACT~~)) tBACT)" ((~~applies to each toxic air pollutant (TAP) discharged or mixture of TAPs, taking in account the potency quantity and toxicity of each toxic air pollutant or mixture of TAPs discharged in addition to the meaning given in WAC 173-400-030(10).~~

~~(5) "Carcinogenic potency factor" means the upper 95th percentile confidence limit of the slope of the dose-response curve and is expressed in units of (mg/kg-day)-1.~~

~~(6) "Class A toxic air pollutant (Class A TAP)" means a substance or group of substances listed in WAC 173-460-150.~~

~~(7) "Class B toxic air pollutant (Class B TAP)" means any substance that is not a simple asphyxiant or nuisance particulate and that is listed in WAC 173-460-160.~~

~~(8) "EPA's Dispersion Modeling Guidelines" means the United States Environmental Protection Agency Guideline on Air Quality Models, EPA (Revised) 40 CFR Part 51 Appendix W, and is hereby incorporated by reference.~~

~~(9) "EPA's Risk Assessment Guidelines" means the United States Environmental Protection Agency's Guidelines for Carcinogenic Risk Assessment, 51 FR 33992 (September 24, 1986) and is hereby incorporated by reference.~~

~~(10)~~)) means best available control technology, as that term is defined in WAC 173-400-030, as applied to toxic air pollutants.

(4) "De minimis emissions" means trivial levels of emissions that do not pose a threat to human health or the environment. The de minimis emission threshold values are listed in WAC 173-460-150.

(5) "Increased cancer risk of one in one hundred thousand" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals continuously exposed to a ((~~Class A~~)) carcinogenic toxic air pollutant at a given average dose for a specified time.

((~~(11) "Increased cancer risk of one in one million" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one million individuals continually exposed to a Class A toxic air pollutant at a given average dose for a specified time.~~

~~(12) "Inhalation Reference Concentration (Inhalation RfC)" means a reference concentration published in the United States Environmental Protection Agency Integrated Risk Information System (IRIS).~~

~~(13) "Mixture" means a combination of two or more substances mixed in arbitrary proportions.~~

~~(14) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted. The term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section. For purposes of this chapter, the term "air contaminant" shall mean "toxic air contaminant" or "toxic air pollutant" as defined in subsection (20) of this section.~~

~~(15)~~)) (6) "New or modified toxic air pollutant source" means((~~:~~

~~(a)~~)) the construction or modification of a stationary source that increases the amount of any toxic air pollutant emitted by such source or that results in the emission of any toxic air pollutant not previously emitted((~~; and~~

~~(b) Any other project that constitutes a new source under section 112 of the Federal Clean Air Act.~~

~~(16) "Second Tier Analysis" means an optional procedure used after T-BACT and acceptable source impact analysis for demonstrating compliance with WAC 173-460-070. The second tier analysis uses a health impact assessment as provided in WAC 173-460-090, instead of an acceptable source impact level.~~

~~(17) "Simple asphyxiant" means a physiologically inert gas or vapor that acts primarily by diluting atmospheric oxygen below the level required to maintain proper levels of oxygen in the blood. Examples of simple asphyxiants are given in Appendix X of the TLV Booklet referred to in subsection (19) of this section and incorporated by reference.~~

~~(18) "Threshold limit value-time weighted average (TLV-TWA)" means a concentration limit recommended by the American Conference of Governmental Industrial Hygienists (ACGIH) for a normal eight-hour workday and forty-hour workweek.~~

~~(19) "TLV Booklet" means "TLVs, Threshold Limit Values and Biological Exposure Indices for 1991-92," published by the American Conference of Governmental Industrial Hygienists and is hereby incorporated by reference.~~

~~(20)~~)) (7) "Small quantity emission rate (SQER)" means a level of emissions below which dispersion modeling is not required to demonstrate compliance with acceptable source impact levels. SQERs are listed in WAC 173-460-150.

(8) "Toxic air pollutant (TAP)" ((~~or "toxic air contaminant"~~)) means any ((~~Class A or Class B~~)) toxic air pollutant listed in WAC 173-460-150 ((~~and 173-460-160. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150 and/or 173-460-160. The term toxic air pollutant does not include particulate matter and volatile organic compounds as generic classes of compounds.~~

~~(21) "Upper bound unit risk factor" means the 95 percent upper confidence limit of an estimate of the extra risk of cancer associated with a continuous 70 year exposure to 1 ug/m3 of a Class~~

~~A toxic air pollutant~~)).

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-030 ((~~Requirements,~~)) Applicability ((~~and exemptions~~)). ((~~(1) Applicability.~~

~~(a)~~)) The provisions of this chapter ((~~shall~~)) apply statewide. ((~~The authority shall enforce WAC 173-460-010, 173-460-020, 173-460-030, 173-460-040, 173-460-050, 173-460-060, 173-460-070, 173-460-080, 173-460-130, 173-460-140, 173-460-150, and 173-460-160.~~

~~(b) Except as provided in this chapter, any new toxic air pollutant source listed in (b)(i), (ii), or (iii) of this subsection that may emit a Class A or Class B TAP into the ambient air is subject to these regulations:~~

~~(i) Standard industrial classifications:~~

~~(A) Major group 10-Metal mining.~~

~~(B) Major group 12-Bituminous coal and lignite mining.~~

~~(C) Major group 13-Oil and gas extraction.~~

~~(D) Manufacturing industries major groups 20-39.~~

~~(E) Major group 49-Electric, gas, and sanitary services except 4971 irrigation systems.~~

~~(F) Dry cleaning plants, 7216.~~

~~(G) General medical surgical hospitals, 8062.~~

~~(H) Specialty hospitals, 8069.~~

~~(I) National security, 9711.~~

~~(ii) Any source or source category listed in WAC 173-400-100, 173-400-115(2), or 173-490-030(1) except WAC 173-490-030 (1)(e) gasoline dispensing facilities.~~

~~(iii) Any of the following sources:~~

~~(A) Landfills.~~

~~(B) Sites subject to chapter 173-340 WAC Model Toxics Control Act--Cleanup regulation.~~

~~(2) Exempt sources.~~

~~(a) Containers such as tanks, barrels, drums, cans, and buckets are exempt from the requirements of this chapter unless equipped with a vent other than those required solely as safety pressure release devices.~~

~~(b) Nonprocess fugitive emissions of toxic air pollutants from stationary sources, such as construction sites, unpaved roads, coal piles, waste piles, and fuel and ash handling operations are exempt from WAC 173-460-060.~~

~~(c) The following sources are generally exempt from the requirements of WAC 173-460-050, 173-460-070, 173-460-080, and 173-460-090. However, the authority may on a case-by-case basis, require compliance with these sections if the authority determines that the amount of emissions, nature of pollutant, or source~~

~~location indicate that the ambient impact should be evaluated.~~

~~(i) Perchloroethylene dry cleaners~~

~~(ii) Petroleum solvent dry cleaning systems~~

~~(iii) Solvent metal cleaners~~

~~(iv) Chromic acid plating and anodizing~~

~~(v) Abrasive blasting~~

~~(d) Demolition and renovation projects involving asbestos removal and disposal are exempt from the requirements of this chapter.~~

~~(e) Process vents subject to 40 C.F.R. Parts 264 and 265, Subpart AA are exempt from the requirements of this chapter.~~)) WAC 173-460-090 and 173-460-100 must be implemented solely by ecology.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-040 New source review. (1) Applicability and exemptions. This chapter supplements the new source review requirements of WAC 173-400-110 by adding ((~~additional new source~~)) review requirements for new and modified toxic air pollutant sources. ((~~If a notice of construction is required under both chapter 173-400 WAC and this chapter, the written applications shall be combined. A notice of construction is a written application to permit construction of a new source.~~

~~(a) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) shall notify the authority prior to the construction, installation, or establishment of a new toxic air pollutant source and shall file a notice of construction application with the authority for the proposed emission unit(s). Notification and notice of construction are not required if the source is an exempt source listed in WAC 173-460-030(2) or subsection (2) of this section.~~

~~(b) The notice of construction and new source review applies only to the affected emission unit(s) and the contaminants emitted from the emission unit(s).~~

~~(c) New source review of a modification shall be limited to the emission unit or units proposed to be modified and the toxic air contaminants whose emissions would increase as a result of the modification.~~

~~(2) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) is not required to notify or file a notice of construction with the authority if any of the following conditions are met:~~

~~(a) Routine maintenance or repair requires equivalent replacement of air pollution control equipment; or~~

~~(b) The new source is a minor process change that does not increase capacity and total toxic air pollutant emissions do not exceed the emission rates specified in small quantity emission rate~~

~~tables in WAC 173-460-080; or~~

~~(c) The new source is the result of minor changes in raw material composition and the total toxic air pollutant emissions do not exceed the emission rates specified in the small quantity emission rate tables in WAC 173-460-080.~~

~~(3) Additional information. Within thirty days of receipt of a notice of construction, the authority may require the submission of additional plans, specifications, and other information necessary for the review of the proposed new or modified source.~~

~~(4) Requirements for new toxic air pollutant sources. The authority shall review notice(s) of construction, plans, specifications, and other associated information to determine that:~~

~~(a) The source will be in accord with applicable federal, state, and authority air pollution control rules and regulations;~~

~~(b) The source will~~)) An action that is exempt from new source review under WAC 173-400-110 (4) or (5) is exempt under this chapter as well, except that a local air authority may adopt its own list of exemptions in accordance with RCW 70.94.331 (2)(b) to operate in lieu of or in addition to the exemptions in WAC 173-400-110 (4) and (5). An action that requires a notice of construction application under WAC 173-400-110 is subject to the review requirements of this chapter, unless the emissions before control equipment of each toxic air pollutant from a new source or the increase in emissions from each modification is less than the applicable de minimis emission threshold for that TAP listed in WAC 173-460-150.

(2) New source review of a modification is limited to the emission unit or units proposed to be modified and the TAPs whose emissions would increase as a result of the modification.

(3) The permitting authority that is reviewing a notice of construction application for a new or modified toxic air pollutant source must ensure that:

(a) The new or modified emission units use ((~~T-BACT~~)) tBACT for emissions control for the toxic air pollutants which are likely to increase; and

((~~(c) Sources required to use T-BACT for emission control demonstrate compliance~~)) (b) The project complies with WAC 173-460-070 as demonstrated by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance((~~,~~)) by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

((~~(5) Preliminary determination. Within thirty days after receipt of all information required, the authority shall:~~

~~(a) Make preliminary determinations on the matters set forth in this section; and~~

~~(b) Initiate compliance with the provisions of WAC 173-400-171 relating to public notice and public comment, as applicable.~~

~~(6) Final determination. If, after review of all information received including public comment, the authority finds that all the conditions in this section are satisfied, the authority shall issue a regulatory order to approve the notice of construction for the proposed new source or modification. If the authority finds that the conditions in this section are not satisfied, the authority~~

~~shall issue an order for the prevention of construction, installation, or establishment of the toxic air pollution source(s). Where ecology has jurisdiction, it will endeavor to make final determinations as promptly as possible.~~

~~(7) Appeal of decision. A final notice of construction decision may be appealed to the pollution control hearings board pursuant to chapter 43.21B RCW.~~

~~(8) Commencement of construction. The owner(s) or operator(s) of the new source shall not commence construction until the applicable notice of construction has been approved.~~

~~(9) Operation and maintenance plan. As a condition of notice of construction approval, prior to start up, the authority may require a plan for the operation and maintenance of all equipment and procedures to assure continuous compliance with this chapter.~~

~~(a) A copy of the plan shall be filed with the authority upon request.~~

~~(b) The plan shall reflect good industrial practice and may include operating parameters and maintenance procedures, and shall be updated to reflect any changes in good industrial practice.~~

~~(c) Submittal of all plans should coincide with the authorities reporting requirements where applicable.~~

~~(10) Jurisdiction. Emission of toxic air pollutants that exceed the acceptable source impact levels listed in WAC 173-460-150 and 173-460-160 requires ecology and, if applicable, authority approval as specified in WAC 173-460-090 and 173-460-100.~~))

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-050 Requirement to quantify emissions. (1) New sources.

((~~(a) When applying for a notice of construction, an owner or operator of~~)) A notice of construction application for a new or modified toxic air ((~~pollution~~)) pollutant source ((~~shall~~)) must quantify ((~~those emissions of each TAP or combination of TAPs that:~~

~~(i) Will be used for the modeling procedures in WAC 173-460-080; and~~

~~(ii) That may be discharged after applying required control technology. The information shall be submitted to the authority.~~

~~(b) Emissions shall be quantified in sufficient detail to determine whether the source complies with the requirements of this chapter~~)) the increase in the emissions of each TAP, after application of tBACT, emitted by the new or modified emission units.

(2) Small quantity ((~~sources~~)) emission rates.

((~~Sources that choose to use small quantity emission rate tables instead of using~~)) A notice of construction application that relies on SQERs rather than dispersion modeling ((~~shall~~)) to

demonstrate compliance with WAC 173-460-070 must quantify the aggregate increase in emissions ((~~as required under WAC 173-460-080, in~~)) of each TAP emitted by the new or modified emission units after application of tBACT. The quantification must contain sufficient detail to demonstrate to the satisfaction of the permitting authority that the emissions are less than the applicable small quantity emission rates listed in WAC ((~~173-460-080~~)) 173-460-150.

(3) Level of detail.

An acceptable source impact level analysis under WAC 173-460-080((~~,~~)) may be based on a conservative estimate of emissions that represents good engineering judgment. If compliance with WAC 173-460-070 and 173-460-080 cannot be demonstrated, more precise emission estimates ((~~shall~~)) may be used to demonstrate compliance with WAC 173-460-090.

((~~(4) Mixtures of toxic air pollutants.~~

~~(a) An owner or operator of a source that may discharge more than one toxic air pollutant may demonstrate compliance with WAC 173-460-070 and 173-460-080 by:~~

~~(i) Quantifying emissions and performing modeling for each TAP individually; or~~

~~(ii) Calculating the sum of all TAP emissions and performing modeling for the total TAP emissions and comparing maximum ambient levels to the smallest ASIL; or~~

~~(iii) Equivalent procedures may be used if approved by ecology.~~

~~(b) Dioxin and furan emissions shall be considered together as one TAP and expressed as an equivalent emission of 2,3,7,8 TCDD based on the relative potency of the isomers in accordance with United States Environmental Protection Agency (EPA) guidelines.~~

~~Note: Copies of EPA "*Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs). 1989 Update*" are available by requesting EPA /625/3-89/016, March 1989 from ORD Publications (513) 684-7562.~~

~~(c) Polyaromatic hydrocarbon (PAH) emissions. The owner or operator of a source that may emit a mixture of polyaromatic hydrocarbon emissions shall quantify the following PAHs and shall consider them together as one TAP equivalent in potency to benzo(a)pyrene: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indenol(1,2,3-cd)pyrene, benzo(a)pyrene. The acceptable source impact analysis shall be conducted using the polyaromatic hydrocarbon emission ASIL contained in WAC 173-460-150(3).~~

~~(d) Uncontrolled roof vent emissions from primary aluminum smelters. The owner or operator of a primary aluminum smelter that may emit a mixture of polyaromatic hydrocarbons from uncontrolled roof vents shall quantify PAH emissions using either of the following methods:~~

~~(i) Quantify PAH emissions using the procedures in (c) of this subsection; or~~

~~(ii) Multiply the total particulate emission mass from the uncontrolled roof vents by the percent of the particulate that is extractable organic matter. The percent extractable organic matter~~

~~shall be considered one percent of total particulate matter unless ecology determines that there is compelling scientific data which demonstrates that the use of this value is inappropriate. The acceptable source impact analysis shall be conducted using the primary aluminum smelter uncontrolled roof vent PAH emission ASIL contained in WAC 173-460-150(3). Note: For example, 100 grams of particulate air emission mass times one percent yields one gram of PAH emissions.~~))

AMENDATORY SECTION (Amending Order 98-04, filed 7/21/98, effective 8/21/98)

WAC 173-460-060 Control technology requirements. (1) Except as provided for in WAC 173-460-040, a person shall not establish, operate, or cause to be established or operated any new or modified toxic air pollutant source which is likely to increase TAP emissions without installing and operating ((~~T-BACT~~)) tBACT. ((~~Satisfaction of the performance requirements listed below fulfill the T-BACT requirement for those particular sources. Local air pollution authorities may develop and require performance requirements in lieu of T-BACT provided that ecology approves the performance requirements as equivalent to T-BACT.~~

~~(1) Perchloroethylene dry cleaners. The requirements for perchloroethylene dry cleaners found in WAC 173-400-075 are considered T-BACT.~~

~~(2) Petroleum solvent dry cleaning systems. A petroleum solvent dry cleaning system shall include the following:~~

~~(a) All cleaned articles are dried in a solvent recovery dryer or the entire dryer exhaust is vented through a properly functioning control device which will reduce emissions to no more than 3.5 kg of VOC per 100 kg dry weight of cleaned articles; and~~

~~(b) All cartridge filtration systems are drained in their sealed housing or other enclosed container before discarding the cartridges; and~~

~~(c) All leaking components shall be repaired immediately.~~

~~(3) Chromic acid plating and anodizing. The facility-wide uncontrolled hexavalent chromium emissions from plating or anodizing tanks shall be reduced by at least ninety-five percent using either of the following control techniques:~~

~~(a) An antimist additive or other equally effective control method approved by ecology or authority; or~~

~~(b) The tank is equipped with:~~

~~(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and~~

~~(ii) An emission control system which limits hexavalent chromium emissions to no more than 0.15 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions~~

~~shall be reduced by ninety-five percent.~~

~~(4) Chromic acid plating and anodizing (greater than 1 kilogram). If the facility-wide hexavalent chromium emissions from chromic acid plating and anodizing are greater than 1 kilogram per year after the application of control techniques required by subsection (3) of this section, the facility-wide hexavalent chromium emissions shall be reduced by at least ninety-nine percent using either of the following control techniques:~~

~~(a) An antimist additive or other equally effective control method approved by ecology or authority; or~~

~~(b) The tank is equipped with:~~

~~(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and~~

~~(ii) An emissions control system which limits hexavalent chromium emissions to no more than 0.03 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-nine percent.~~

~~(5) Solvent metal cleaners.~~

~~(a) Any solvent metal cleaner shall include all of the following equipment:~~

~~(i) A cover for the solvent tank which shall be closed at all times except when processing work in the degreaser. However, the cover shall be closed to the maximum extent possible when parts are being degreased;~~

~~(ii) A facility for draining cleaned parts such that the drained solvent is returned to the solvent tank;~~

~~(iii) For cold solvent cleaners, a freeboard ratio greater than or equal to 0.75;~~

~~(iv) Vapor degreasers shall have:~~

~~(A) A high vapor cutoff thermostat with manual reset; and~~

~~(B) For degreasers with spray devices, a vapor-up thermostat which will allow spray operation only after the vapor zone has risen to the design level; and~~

~~(C) Either a freeboard ratio greater than or equal to 1.00 or a refrigerated freeboard chiller; and~~

~~(v) Conveyorized vapor degreasers shall have:~~

~~(A) A drying tunnel or a rotating basket sufficient to prevent cleaned parts from carrying liquid solvent out of the degreaser; and~~

~~(B) A high vapor cutoff thermostat with manual reset; and~~

~~(C) A vapor-up thermostat which will allow conveyor movement only after the vapor zone has risen to the design vapor level.~~

~~(b) The operation of any solvent metal cleaner shall meet the following requirements:~~

~~(i) Solvent shall not leak from any portion of the degreasing equipment;~~

~~(ii) Solvent, including waste solvent, shall be stored in closed containers and shall be disposed of in such a manner as to prevent its evaporation into the atmosphere;~~

~~(iii) For cold cleaners, cleaned parts shall be drained until dripping ceases; and~~

~~(iv) Degreasers shall be constructed to allow liquid solvent from cleaned parts to drain into a trough or equivalent device and return to the solvent tank.~~

~~(c) For open-top vapor degreasers, solvent drag-out shall be minimized by the following measures:~~

~~(i) Racked parts shall be allowed to drain fully;~~

~~(ii) The work load shall be degreased in the vapor zone until condensation ceases;~~

~~(iii) Spraying operations shall be done within the vapor layer;~~

~~(iv) When using a powered hoist, the vertical speed of parts in and out of the vapor zone shall be less than three meters per minute (ten feet per minute);~~

~~(v) When the cover is open, the lip of the degreaser shall not be exposed to steady drafts greater than 15.3 meters per minute (fifty feet per minute); and~~

~~(vi) When equipped with a lip exhaust, the fan shall be turned off when the cover is closed.~~

~~(d) For conveyorized vapor degreasers, solvent drag-out shall be minimized by the following measures:~~

~~(i) Racked parts shall be allowed to drain fully; and~~

~~(ii) Vertical conveyor speed shall be maintained at less than three meters per minute (ten feet per minute).~~

~~(6) Abrasive blasting.~~

~~(a) Abrasive blasting shall be performed inside a booth or hangar designed to capture the blast grit or overspray.~~

~~(b) Outdoor blasting of structures or items too large to be reasonably handled indoors shall employ control measures such as curtailment during windy periods and enclosure of the area being blasted with tarps.~~

~~(c) Outdoor blasting shall be performed with either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.~~

~~(d) All abrasive blasting with sand shall be performed inside a blasting booth or cabinet.~~))

(2) A notice of construction application for a new or modified toxic air pollutant source must demonstrate that the new or modified emission units will employ tBACT for all TAPs for which the increase in emissions will exceed de minimis emission values as found in WAC 173-460-150. TAP emission increases from nonprocess fugitive emissions activities such as construction or demolition sites, unpaved and paved roads, coal piles, waste piles and fuel and ash handling operations are exempt from the requirement to apply tBACT.

AMENDATORY SECTION (Amending Order 90-62, filed 6/18/91, effective 9/18/91)

WAC 173-460-070 Ambient impact requirement. ((~~When applying for~~)) A notice of construction ((~~under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall~~)) application must demonstrate that the increase in emissions of toxic air pollutants from the new or modified emission units at the source are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Compliance ((~~shall~~)) must be demonstrated in any area to which the applicant does not ((~~have restricted~~)) restrict or ((~~controlled public~~)) control access. The ((~~source shall~~)) application must demonstrate compliance by using procedures established in this chapter after complying with the control technology requirements in WAC 173-460-060.

NEW SECTION

WAC 173-460-071 Voluntary limits on emissions. (1) If requested by an applicant, the permitting authority may issue a regulatory order that limits emissions of a particular TAP to a level that is lower than the potential emissions of that particular TAP otherwise allowed under all applicable requirements of chapter 70.94 RCW and the federal Clean Air Act.

(2) Any order issued under this section is subject to the notice and comment procedures in WAC 173-400-171 or the permitting authority's public notice and commenting procedures.

(3) Any order issued under this section must include monitoring, recordkeeping, and reporting requirements sufficient to ensure that the applicant complies with any conditions established under this section. Monitoring requirements must use terms, test methods, units, averaging periods, and other statistical conventions consistent with the requirements of WAC 173-400-105.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-080 ((~~Demonstrating ambient impact compliance.~~)) First tier review. (1) ((~~When applying for~~)) A notice of construction ((~~under WAC 173-460-040, the owner or operator of~~)) application for a new or modified toxic air pollutant source ((~~which is likely to increase TAP emissions shall complete~~)) must include an acceptable source impact level analysis for ((~~Class A~~

~~and Class B~~)) each TAP((~~s~~)) emitted by the new or modified emission units with an emission increase greater than the de minimis emission level specified in WAC 173-460-150. The permitting authority may complete this analysis.

(2) ((~~Acceptable source impact analysis.~~

~~(a) Carcinogenic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class A TAP from the source and compare the estimated incremental ambient values to the Class A acceptable source impact levels in WAC 173-460-150. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.~~

~~(b) Other toxic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class B TAP from the source and compare the estimated ambient values to the Class B acceptable source impact levels in WAC 173-460-160. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.~~

~~(c) Dispersion modeling. The owner or operator shall use dispersion modeling techniques in accordance with EPA guidelines. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission estimation techniques shall be used. Refined modeling techniques shall be approved by ecology and the authority. (Note: EPA's Guideline on Air Quality Models, EPA 450/2-78-027R, can be obtained through NTIS (703) 487-4650 or can be downloaded from the OAQPS Technology Transfer Network electronic bulletin board system).~~

~~(d) Averaging times. The owner or operator shall use the averaging times in (d)(i), (ii), (iii) of this subsection unless alternate averaging times are approved by ecology. Ecology may allow the use of an alternate averaging time if it determines that the operating procedures of the source may cause a high concentration of a TAP for a short period and that consideration of potential health effects due to peak exposures may be warranted for the TAP.~~

~~(i) An annual average shall be used for Class A TAPs listed in WAC 173-460-150(2).~~

~~(ii) The averaging times specified in WAC 173-460-150(3) shall be used for Class A TAPs listed in WAC 173-460-150(3).~~

~~(iii) A twenty-four-hour averaging time shall be used for Class B TAPs listed in WAC 173-460-160.~~

~~(e) Small quantity emission rates. Instead of using dispersion modeling to show compliance with ambient impact demonstration requirements in WAC 173-460-080 and 173-460-090, a source may use the small quantity emission rate tables for all toxic air pollutants with acceptable source impact levels equal to or greater than 0.001 ug/m3. A source must first meet control technology and emission quantification requirements of WAC 173-460-050 and 173-460-060, then demonstrate that the source emission rate does not exceed the rates specified in the appropriate table below.~~

~~SMALL QUANTITY EMISSION RATES~~
~~CLASS A TOXIC AIR POLLUTANTS~~

~~Acceptable Source Impact Level (Annual ug/m3)~~	~~TAP Emissions Pounds per Year (10 meter stack and downwash)~~
~~0.001 to 0.0099~~	~~0.5~~
~~0.01 to 0.06~~	~~10~~
~~0.07 to 0.12~~	~~20~~
~~0.13 to 0.99~~	~~50~~
~~1.0 to 10~~	~~500~~

~~SMALL QUANTITY EMISSION RATES~~
~~CLASS B TOXIC AIR POLLUTANTS~~

~~Acceptable Source Impact Level (24 hour ug/m3)~~	~~TAP Emissions~~	
	~~Pounds per Year~~	~~Pounds per Hour~~
~~Less than 1~~	~~175~~	~~0.02~~
~~1 to 9.9~~	~~175~~	~~0.02~~
~~10 to 29.9~~	~~1,750~~	~~0.20~~
~~30 to 59.9~~	~~5,250~~	~~0.60~~
~~60 to 99.9~~	~~10,500~~	~~1.20~~
~~100 to 129.9~~	~~17,500~~	~~2.0~~
~~130 to 250~~	~~22,750~~	~~2.6~~
~~Greater than 250~~	~~43,748~~	~~5.0~~

~~(3) Criteria for compliance. Compliance with WAC 173-460-070 is demonstrated if the authority determines that, on the basis of the acceptable source impact analysis, the source's maximum incremental ambient air impact levels do not exceed the Class A or Class B acceptable source impact levels in WAC 173-460-150 and 173-460-160; or, if applicable, the source TAP emission rates do not exceed the rates specified in subsection (2)(e) of this section.~~))
The acceptable source impact analysis requirement of WAC 173-460-070 can be satisfied for any TAP using either dispersion modeling or the small quantity emission rate.

(a) Dispersion modeling. The applicant who relies on dispersion modeling must model the aggregate increase in the emissions of each TAP emitted by the new or modified emission units, after application of tBACT. The notice of construction application must demonstrate that the modeled ambient impact of the aggregate emissions increase of each TAP does not exceed the ASIL for that TAP as listed in WAC 173-460-150. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission techniques must be used. Refined modeling techniques must be approved by the permitting authority.

(b) Small quantity emission rates. An applicant may show for any TAP that the aggregate increase in emissions of that TAP, after application of tBACT, is less than the small quantity emission rate listed for that TAP in WAC 173-460-150.

(3) Reduction of TAPs from existing emission units. An applicant may include in a acceptable source impact analysis proposed reductions in actual emissions of a particular TAP from emission units at the source that are not new or modified for the purpose of offsetting emissions of that TAP caused by the new or modified source. The reductions in TAP emissions authorized by this subsection must be included in the approval order as enforceable emission limits and must meet all the requirements of

WAC 173-460-071.

(4) Decision criteria.

(a) If the permitting authority finds that the modeled impact of the increase in emissions of a TAP from the new or modified emission units does not exceed the ASIL for that TAP then the authority may approve the notice of construction application.

(b) If the permitting authority finds that the modeled impact of the increase in emissions of a TAP from the new or modified emission units exceeds the ASIL for that TAP then the permitting authority may not approve the project. The applicant may file a second tier review application in compliance with WAC 173-460-090.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-090 Second tier ((~~analysis~~)) review. (1) Applicability.

((~~(a) The owner or operator~~)) An applicant who cannot demonstrate ((~~class A or class B TAP source~~)) compliance with WAC 173-460-070 ((~~and 173-460-080~~)) using an acceptable source impact level analysis as provided in WAC 173-460-080((~~(2)~~)), may submit a petition requesting that ecology perform a second tier ((~~analysis evaluation~~)) review to determine a means of compliance with WAC 173-460-070 ((~~and 173-460-080 by establishing allowable emissions for the source~~)). Petitions for second tier ((~~analysis evaluation shall~~)) review must be submitted to ecology with a copy to the ((~~local~~)) permitting authority ((~~or ecology if ecology has jurisdiction over the source. Petitions received by local authorities shall be submitted to ecology within ten days of receipt. A second tier analysis evaluation may be requested when a source wishes to more accurately characterize risks, to justify risks greater than acceptable source impact levels, or to otherwise modify assumptions to more accurately represent risks. Risks may be more accurately characterized by utilizing updated EPA unit risk factors, inhalation reference concentrations, or other EPA recognized or approved methods. Ecology shall specify the maximum allowable emissions of any class A or class B TAP source based on ecology's second tier analysis evaluation.~~

~~(b)~~)) with jurisdiction.

(2) Second tier petition submittal requirements. Ecology ((~~shall~~)) will evaluate a ((~~source's~~)) second tier ((~~analysis~~)) petition only if:

((~~(i)~~)) (a) The permitting authority ((~~has advised ecology that other conditions for processing the notice of construction have been met~~)) submits to ecology a preliminary order of approval that addresses all applicable new source review issues with the exception of the outcome of the second tier review, State Environmental Policy Act review, public notification, and

prevention of significant deterioration review; and

((~~(ii)~~)) (b) The emission controls contained in the ((~~conditional notice of construction~~)) preliminary order of approval represent at least ((~~T-BACT~~)) tBACT; and

((~~(iii)~~)) (c) The applicant has developed a health impact assessment protocol that has been approved by ecology;

(d) The ambient ((~~concentrations~~)) impact of the aggregate emissions increase of each TAP that exceeds acceptable source impact levels ((~~after~~)) has been quantified using ((~~more~~)) refined ((~~emission quantification and~~)) air dispersion modeling techniques as approved in the health impact assessment protocol; and

(e) The petition contains a health impact assessment conducted in accordance with the approved health impact assessment protocol.

Note: Contact ecology's air quality program for a copy of a guidance document to assist in the preparation of the health impact assessment protocol.

((~~(c) Ecology shall determine whether the conditions in (b)(i), (ii), and (iii) of this subsection for a second tier analysis have been satisfied within ten working days of receipt of all information needed to make the determination. The matter shall be returned to the authority if ecology finds the conditions for a second tier analysis evaluation have not been met.~~

~~(2) Jurisdiction.~~

~~(a) Any second tier analysis application submitted by a source wishing to emit toxic air pollutants at levels greater than the acceptable source impact level contained in WAC 173-460-150 or 173-460-160 shall be approved or rejected by ecology.~~

~~(b) Any new emission limits approved by ecology as a result of the second tier analysis evaluation shall be enforced by the authority provided the authority approves the new emission limits.~~

~~(3) Approval criteria.~~

~~(a) Based on the second tier analysis, ecology may approve the emissions of TAPs from a source where ambient concentrations exceed acceptable source impact levels only if it determines that emission controls represent at least T-BACT and the source demonstrates that emissions of Class A TAPs are not likely to result in an increased cancer risk of more than one in one hundred thousand. The emission of Class A TAPs at levels likely to result in an increased cancer risk of more than one in one hundred thousand requires the approval of the director after complying with WAC 173-460-100.~~

~~(b) Ecology shall consider the second tier analysis and other information submitted by the applicant as well as department of health comments.~~

~~(i) Comments from other agencies and universities with appropriate expertise may also be considered in the decision to approve emissions that exceed acceptable source impact levels.~~

~~(ii) Public comments shall be considered if the source applies for a risk management decision under WAC 173-460-100.~~

~~(4) Contents of the second tier analysis.~~

~~(a) The second tier analysis consists of a health impact assessment. The applicant shall complete and submit a health impact assessment to ecology which includes the following information. Ecology may approve the submittal of less information~~

~~if it determines that such information is sufficient to perform the second tier analysis evaluation. The health impact assessment shall be prepared in accordance with EPA's risk assessment guidelines as defined in WAC 173-460-020(9).~~

~~(i) Demographics such as population size, growth, and sensitive subgroups;~~

~~(ii) Toxicological profiles of all toxic air pollutants that exceed the ASIL;~~

~~(iii) Characterization of existing pathways and total daily intake for toxic air pollutants that exceed the ASIL;~~

~~(iv) Contribution of the proposed source toward total daily intake for toxic air pollutants that exceed the ASIL;~~

~~(v) Using existing data, characterization of risk from current exposure to the toxic air pollutants that exceed the ASIL. This includes existing TAP sources in the area, and anticipated risk from the new source;~~

~~(vi) Additive cancer risk for all Class A toxic air pollutants which may be emitted by the source;~~

~~(vii) Other information requested by ecology and pertinent to ecology's decision to approve the second tier application;~~

~~(viii) Uncertainty in the data; and~~

~~(ix) Length of exposure and persistence in the environment.~~

~~(b)~~)) (3) Health impact assessment (HIA) protocol. The HIA presents data about the new or modified source and its built and natural environment. A HIA includes but is not limited to: Site description, TAP concentrations and toxicity, identification of exposed populations and an exposure assessment. The HIA protocol must be reviewed and approved by ecology prior to development of the HIA.

(4) The health impact assessment ((~~shall~~)) must utilize current scientific information. New scientific information on the toxicological characteristics of toxic air pollutants may be used by ecology to justify modifications of ((~~upper bound unit risk factors used to calculate ASILs in WAC 173-460-150 and/or absorption rates of individual toxic air pollutants if ecology determines there is compelling scientific data which demonstrates that the use of EPA recognized or approved methods are inappropriate.~~

~~(5) Additional information.~~

~~(a) If approved by ecology, newly discovered scientific information which was unavailable at the time of the original submission of the health assessment may be used to justify modifications of the original health assessment. Ecology may approve the additional information if the source exercised due diligence at the time of original submission.~~

~~(b) Within thirty days after receipt of the second tier analysis and all supporting data and documentation, ecology may require the submission of additional information needed to evaluate the second tier analysis.~~

~~(6) Determination.~~

~~(a) If the second tier analysis is approved by ecology, ecology will return the petition to the authority and the authority~~

~~may approve the notice of construction.~~

~~(b) The authority shall specify allowable emissions consistent with ecology's second tier analysis evaluation determination expressed in weight of pollutant per unit time for each emissions unit involved in the application. The notice of construction shall also include all requirements necessary to assure that conditions of this chapter and chapter 173-400 WAC are satisfied.~~

~~(7) Public notification requirements.~~

~~Ecology decisions regarding second tier analysis or decisions under WAC 173-460-100 shall comply with public notification requirements contained in WAC 173-400-171.~~)) risk-based concentrations.

(5) Background concentrations of TAPs will be considered as part of a second tier review. Background concentrations can be estimated using:

(a) The latest National Ambient Toxics Assessment data for the appropriate census tracts; or

(b) Ambient monitoring data for the project's location; or

(c) Modeling of emissions of the TAPs subject to second tier review from all stationary sources within 1.5 kilometers of the source location.

(6) Reduction of TAPs from existing emission units. For the purpose of offsetting emissions of a particular TAP, an applicant may propose reductions in actual emissions of that TAP from existing, unmodified emission units at the source or existing, unmodified emission units at other nearby sources. The health impact analysis must evaluate the benefits of the emission reductions. The reductions in TAP emissions authorized by this subsection must be included in an approval order as enforceable emission limits and must meet all requirements of WAC 173-460-071.

(7) Approval criteria for second tier review. Ecology may recommend approval of a project that is likely to cause an exceedance of acceptable source impact levels for one or more TAPs only if it determines that the emission controls for the new and modified emission units represent tBACT and the applicant demonstrates that the increase in emissions of TAPs is not likely to result in an increased cancer risk of more than one in one hundred thousand and ecology determines that the noncancer hazard is found to be acceptable.

(8) Application processing. Within thirty days after receiving a second tier petition ecology must either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information required to make it complete.

(9) Public involvement. All notice of construction approval orders with a second tier component are subject to the public notice and comment requirements of WAC 173-400-171, which may be integrated with the permitting authority's public notice and comment procedures.

(10) Recommendation. Within sixty days of determining that a petition is complete ecology must make a recommendation to the permitting authority.

(a) If ecology recommends approval of the second tier petition, the permitting authority may approve the notice of construction application. Any new emission limits or conditions specified by ecology must be incorporated into the approval order.

(b) If ecology recommends denial of the second tier petition, then the permitting authority may not approve the project.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-100 ((~~Request for risk management decision.~~)) Third tier review. (1) Applicability. ((~~The owner or operator of a source that emits Class A TAPs that are likely to result in an increased cancer risk of more than one in one hundred thousand may request~~)) An applicant for a project that exceeds the second tier review thresholds may submit a third tier petition requesting that the director of ecology ((~~establish allowable emissions for the source~~)) approve the project based on a risk management analysis.

(2) Contents of the ((~~application~~)) petition.

The ((~~applicant shall~~)) petition must meet the submittal requirements of WAC 173-460-090((~~(1) and submit all materials required under WAC 173-460-090 (4) and (5)~~)). The applicant may submit the request for a risk management decision concurrently with the second tier ((~~analysis application~~)) petition. Prior denial of ((~~the~~)) a second tier ((~~analysis application~~)) petition submitted under WAC 173-460-090((~~(6)~~)) (8) is not required.

(3) Criteria for approval. ((~~Ecology may approve the emissions of TAPs from a source where ambient concentrations are likely to result in an increased cancer risk of more than one in one hundred thousand only if the source first demonstrates the following~~)) Ecology's director must find that the following conditions are met before approving a third tier petition:

(a) Proposed emission controls represent ((~~all known available and reasonable technology~~)) at least tBACT; and

(b) ((~~Application of all known available toxic air pollution prevention methods to reduce, avoid, or eliminate toxic air pollutants prior to their generation including recycling, chemical substitution, and efforts to redesign processes~~)) A HIA has been completed as described in WAC 173-460-090(3); and

(c) ((~~The proposed changes~~)) Approval of the project will result in a greater environmental benefit to the ((~~environment as a whole~~)) state of Washington.

(4) Additional methods to reduce toxic air pollutants. In addition to the requirements in subsection (3) of this section, the ((~~owner or operator~~)) applicant may propose and ecology may consider measures that would reduce community exposure, especially exposure of that portion of the community subject to the greatest additional risk, to comparable toxic air pollutants provided that

such measures are not already required.

(5) Application processing. Within thirty days of receiving a third tier petition ecology must determine if the petition includes the information required in WAC 173-460-090. If the petition is deemed complete, ecology must begin substantive review. If the petition is deemed incomplete, ecology must give written notification to the applicant of the information that is required to make the petition complete.

(6) Public involvement. Ecology will initiate public notice and comment within ((~~thirty~~)) sixty days of ((~~receipt of a completed risk management decision application~~)) determining that a third tier petition is complete. In addition to the public notice and comment requirements of WAC 173-400-171, the ((~~owner or operator shall~~)) applicant must hold a public hearing to:

(a) Present the results of the ((~~second tier~~)) health impact analysis, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and

(b) Participate in discussions and answer questions.

((~~(6) Time limitation. The owner or operator shall commence construction within eighteen months of the director's approval.~~))

(7) Recommendation.

(a) If ecology recommends approval of the third tier petition, the permitting authority may approve the notice of construction application. Any new emission limits or conditions specified by ecology must be incorporated into the approval order.

(b) If ecology recommends denial of the third tier petition then the permitting authority may not approve the project.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-150 ((~~Class A toxic air pollutants: Known, probable and potential human carcinogens and acceptable source impact levels.~~)) Table of ASIL, SQER and de minimis emission values.

((~~(1) TABLE I~~
~~CLASS A TOXIC AIR POLLUTANTS~~
~~Known and Probable Carcinogens~~

~~CAS #~~	~~SUBSTANCE~~
~~75-07-0~~	~~Acetaldehyde~~
~~53-96-3~~	~~2-Acetylaminofluorene~~
~~79-06-1~~	~~Acrylamide~~
~~107-13-1~~	~~Acrylonitrile~~
~~309-00-2~~	~~Aldrin~~
~~——~~	~~Aluminum smelter polyaromatic hydrocarbon emissions~~
~~117-79-3~~	~~2-Aminoanthraquinone~~
~~97-56-3~~	~~o-Aminoazotoluene~~
~~92-67-1~~	~~4-Aminobiphenyl~~
~~61-82-5~~	~~Amitrole~~
~~62-53-3~~	~~Aniline~~
~~90-04-0~~	~~o-Anisidine~~

CAS #	SUBSTANCE
C7440-38-2	Arsenic and inorganic arsenic compounds
1332-21-4	Asbestos
2465-27-2	Auramine (technical grade)
71-43-2	Benzene
92-87-5	Benzidine and its salts
56-55-3	Benzo(a)anthracene
50-32-8	Benzo(a)pyrene
205-99-2	Benzo(b)fluoranthene
205-82-3	Benzo(j)fluoranthene
207-08-9	Benzo(k)fluoranthene
1694-09-3	Benzyl violet 4b
7440-41-7	Beryllium and compounds
111-44-4	Bis(2-chloroethyl)ether
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)
542-88-1	Bis(chloromethyl)ether
75-25-2	Bromoform
106-99-0	1,3-Butadiene
3068-88-0	B-Butyrolactone
7440-43-9	Cadmium and compounds
56-23-5	Carbon tetrachloride
57-74-9	Chlordane
510-15-6	Chlorobenzilate
67-66-3	Chloroform
107-30-2	Chloromethyl methyl ether (technical-grade)
108-43-0	Chlorophenols
126-99-8	Chloroprene
C7440-47-3	Chromium, hexavalent metal and compounds
———	Coke oven emissions
8001-58-9	Creosote
135-20-6	Cupferron
94-75-7	2,4-D and esters
3547-04-4	DDE (p,p'-Dichlorodiphenyldichloroethylene)
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis(p-chlorophenyl)-ethane)
613-35-4	N,N-Diacetylbenzidine
101-80-4	4,4'-Diaminodiphenyl ether
226-36-8	Dibenz(a,h)acridine
53-70-3	Dibenz(a,h)anthracene
224-42-0	Dibenz(a,j)acridine
132-64-9	Dibenzofurans
189-64-0	Dibenzo(a,h)pyrene
191-30-0	Dibenzo(a,l)pyrene
189-55-9	1,2,7,8-Dibenzopyrene (dibenzo(a,i)pyrene)
192-65-4	Dibenzo(a,e)pyrene
764-41-0	1,4-Dichloro-2-butene
28434-86-8	3,3'-Dichloro-4,4'-diaminodiphenyl ether
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
107-06-2	1,2-Dichloroethane (ethylene chloride)
75-09-2	Dichloromethane (methylene chloride)
696-28-6	Dichlorophenylarsine (arsenic group)
78-87-5	1,2-Dichloropropane
60-57-1	Dieldrin
1615-80-1	1,2-Diethylhydrazine
101-90-6	Diglycidyl resorcinol ether
119-90-4	3,3'-Dimethoxybenzidine (ortol-dianisidine)
119-93-7	3,3-Dimethyl benzidine
77-78-1	Dimethyl sulfate
540-73-8	1,2-Dimethylhydrazine
123-91-1	1,4-Dioxane
———	Dioxins and furans
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin
106-93-4	Ethylene dibromide (dibromethane)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
50-00-0	Formaldehyde
67-45-8	Furazolidone
	Furium (nitrofuran group)
765-34-4	Glyciadaldehyde
76-44-8	Heptachlor

CAS #	SUBSTANCE
118-74-1	Hexachlorobenzene
319-84-6	Hexachlorocyclohexane (Lindane) Alpha BHC
319-85-7	Hexachlorocyclohexane (Lindane) Beta BHC
58-89-9	Hexachlorocyclohexane (Lindane) Gamma BHC
680-31-9	Hexamethylphosphoramide
302-01-2	Hydrazine
193-39-5	Indeno(1,2,3-cd)pyrene
———	Isopropyl oils
———	Lead compounds
301-04-2	Lead acetate
7446-27-7	Lead phosphate
129-15-7	2-Methyl-1-nitroanthraquinone
592-62-1	Methyl azoxymethyl acetate
3697-24-3	5-Methylchrysene
101-14-4	4,4'-Methylenebis(2-chloroaniline) (MBOCA)
838-88-0	4,4'-Methylenebis(2-methylaniline)
101-77-9	4,4-Methylene dianiline
13552-44-8	4,4-Methylenedianiline dihydrochloride
64091-91-4	4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone
2385-85-5	Mirex
139-91-3	5-(Morpholinomethyl)-3-amino)-2-oxazolidinone (furaltudone)
134-32-7	1-Napthylamine
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)
531-82-8	N-(4-(5-Nitro-2-furyl)-2-thiazolyl)acetamide
602-87-9	5-Nitroacenaphthene
1836-75-5	Nitrofen
	Nitrofurans
59-87-0	Nitrofurazone
555-84-9	1-(5-Nitrofurfurylidene)amino)-2-imidazolidinone
126-85-2	Nitrogen mustard N-oxide
302-70-5	Nitrogen mustard N-oxide hydrochloride
79-46-9	2-Nitropropane
924-16-3	N-Nitrosodi-n-butylamine
759-73-9	N-Nitroso-N-ethylurea (NEU)
615-53-2	N-Nitroso-N-methylurethane
621-64-1	N-Nitrosodi-n-propylamine
10595-95-6	N-Nitrosomethylethylamine
59-89-2	N-Nitrosomorpholine
86-30-6	N-Nitrosodiphenylamine
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine) (DEN)
62-75-9	N-Nitrosodimethylamine
2646-17-5	Oil orange SS
794-93-4	Panfuran S (dihydroxymethylfuratrizine)
87-86-5	Pentachlorophenol
127-18-4	Perchloroethylene (tetrachloroethylene)
63-92-3	Phenoxybenzamine hydrochloride
	N-Phenyl-2-napthylamine
———	Polyaromatic hydrocarbons (PAH)
1336-36-3	Polychlorinated biphenyls (PCBs)
3761-53-3	Ponceau MX
	P(p)(alpha, alpha, alpha)-Tetra-chlorotoluene
1120-71-4	1,3-Propane sultone
75-56-9	Propylene oxide
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)
139-65-1	4,4'-Thiodianiline
1314-20-1	Thorium dioxide
95-80-7	2,4-Toluene diamine
584-84-9	2,4-Toluene diisocyanate
95-53-4	o-Toluidine
636-21-5	o-Toluidine hydrochloride
8001-35-2	Toxaphene
55738-54-0	Trans-2((Dimethylamino)methylimino)-5-(2-(5-nitro-2-furyl) vinyl-1,3,4-oxadiazole
79-01-6	Trichloroethylene
88-06-2	2,4,6-Trichlorophenol
75-01-4	Vinyl chloride

(2) TABLE II
CLASS A TOXIC AIR POLLUTANTS
WITH ESTABLISHED
ACCEPTABLE SOURCE IMPACT LEVELS

CAS #	SUBSTANCE	10-6 RISK ASIL MICRO-GRAMS/M^3 ANNUAL AVERAGE
75-07-0	Acetaldehyde	0.4500000
79-06-1	Acrylamide	0.0007700
107-13-1	Acrylonitrile	0.0150000
309-00-2	Aldrin	0.0002000
62-53-3	Aniline	6.3000000
C7440-38-2	Arsenic and inorganic arsenic compounds	0.0002300
1332-21-4	Asbestos (Note: fibers/ml)	0.0000044
71-43-2	Benzene	0.1200000
92-87-5	Benzidine and its salts	0.0000150
50-32-8	Benzo(a)pyrene	0.0004800
7440-41-7	Beryllium and compounds	0.0004200
111-44-4	Bis(2-chloroethyl)ether	0.0030000
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	2.5000000
542-88-1	Bis(chloromethyl)ether	0.0000160
75-25-2	Bromoform	0.9100000
106-99-0	1,3-Butadiene	0.0036000
7440-43-9	Cadmium and compounds	0.0005600
56-23-5	Carbon tetrachloride	0.0670000
57-74-9	Chlordane	0.0027000
510-15-6	Chlorobenzilate	0.2000000
67-66-3	Chloroform	0.0430000
108-43-0	Chlorophenols	0.1800000
C7440-47-3	Chromium, hexavalent metal and compounds	0.0000830
———	Coke oven emissions	0.0016000
3547-04-4	DDE (p,p'-dichlorodiphenyldichloroethylene)	0.1000000
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis-(p-chlorophenyl)-ethane)	0.0100000
764-41-0	1,4-Dichloro-2-butene	0.0003800
106-46-7	1,4-Dichlorobenzene	1.5000000
91-94-1	3,3'-Dichlorobenzidine	0.0770000
107-06-2	1,2-Dichloroethane (ethylene chloride)	0.0380000
75-09-2	Dichloromethane (methylene chloride)	0.5600000
60-57-1	Dieldrin	0.0002200
119-93-7	3,3-Dimethyl benzidine	0.0038000
123-91-1	1,4-Dioxane	0.0320000
122-66-7	1,2-Diphenylhydrazine	0.0045000
106-89-8	Epichlorohydrin	0.8300000
106-93-4	Ethylene dibromide (dibromethane)	0.0045000
75-21-8	Ethylene oxide	0.0100000
96-45-7	Ethylene thiourea	1.0000000
50-00-0	Formaldehyde	0.0770000
76-44-8	Heptachlor	0.0007700
118-74-1	Hexachlorobenzene	0.0022000
58-89-9	Hexachlorocyclohexane (Lindane) gamma-BHC	0.0026000
302-01-2	Hydrazine	0.0002000
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)	0.0021000
924-16-3	N-Nitrosodi-n-butylamine	0.0006300
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine)(DEN)	0.0000230
62-75-9	N-Nitrosodimethylamine	0.0000710
79-46-9	2-Nitropropane	0.0003700
87-86-5	Pentachlorophenol	0.3300000
127-18-4	Perchloroethylene (tetrachloroethylene)	1.1000000
1336-36-3	Polychlorinated biphenyls (PCB)	0.0045000
75-56-9	Propylene oxide	0.2700000
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	0.00000003

CAS #	SUBSTANCE	10-6 RISK ASIL MICRO-GRAMS/M^3 ANNUAL AVERAGE
95-80-7	2,4-Toluene diamine	0.0110000
95-53-4	o-Toluidine	0.1400000
636-21-5	o-Toluidine hydrochloride	0.1400000
8001-35-2	Toxaphene	0.0031000
79-01-6	Trichloroethylene	0.5900000
88-06-2	2,4,6-Trichlorophenol	0.3200000
75-01-4	Vinyl chloride	0.0120000

(3) TABLE III
CLASS A TOXIC AIR POLLUTANTS
WITH SPECIAL ACCEPTABLE SOURCE
IMPACT LEVELS

CAS #	SUBSTANCE	ASIL MICRO-GRAMS/M^3	AVERAGING TIME
———	Primary aluminum smelter uncontrolled roof vent polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.0013	Annual
61-82-5	Amitrole	0.06	24 hour
90-04-0	o-Anisidine	1.7	24 hour
126-99-8	β-Chloroprene	120	24 hour
94-75-7	2,4-D and esters	33	24 hour
78-87-5	1,2-Dichloropropane	4.0	24 hour
77-78-1	Dimethyl sulfate	1.7	24 hour
540-73-8	1,2-Dimethylhydrazine	4.0	24 hour
319-84-6	Hexachlorocyclohexane (Lindane) alpha BHC	1.7	24 hour
319-85-7	Hexachlorocyclohexane (Lindane) beta BHC	1.7	24 hour
———	Lead compounds	0.5	24 hour
101-14-4	4,4'-Methylenebis (2-Chloroaniline) (MBOCA)	0.7	24 hour
101-77-9	4,4-Methylene dianiline	2.7	24 hour
———	Polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.00048	Annual
584-84-9	2,4-Toluene diisocyanate	0.12	24 hour))

The following table lists the common name of toxic air pollutants, the chemical abstract service (CAS) number; the averaging period; the acceptable source impact level (ASIL); the small quantity emission rate (SQER); and de minimis emission values.

Common Name	CAS #	Averaging Period	ASIL (µg/m^3)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
1,1,1,2-Tetrachloroethane	630-20-6	year	0.135	25.9	1.3
1,1,1,2-Tetrafluoroethane	811-97-2	24-hr	8.00E+04	438	21.9
1,1,1-Trichloroethane	71-55-6	24-hr	1000	5.48	0.274
1,1,2,2-Tetrachloroethane	79-34-5	year	0.0172	3.3	0.165

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
1,1,2-Trichloroethane	79-00-5	year	0.0625	12	0.6
1,1-Dichloroethane	75-34-3	year	0.625	120	6
1,1-Dichloroethylene	75-35-4	24-hr	200	1.1	0.0548
1,1-Difluoroethane	75-37-6	24-hr	4.00E+04	219	11
1,1-Dimethylhydrazine	57-14-7	24-hr	0.5	0.00274	0.000137
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	year	0.000263	0.0505	0.00252
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-Dioxin	3268-87-9	year	0.000263	0.0505	0.00252
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,6,7,8 Hexachlorodibenzo-p-dioxin	57653-85-7	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	year	5.26E-07	0.000101	5.05E-06
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	year	2.63E-08	5.05E-06	2.52E-07
1,2,3-Trichloropropane	96-18-4	24-hr	1.84	0.0101	0.000504
1,2-Dibromo-3-chloropropane	96-12-8	year	0.000526	0.101	0.00505
1,2-Dibromoethane	106-93-4	year	0.0141	2.71	0.135
1,2-Dichloroethane	107-06-2	year	0.0385	7.39	0.369
1,2-Dichloropropane	78-87-5	year	0.1	19.2	0.959
1,2-Dimethylhydrazine	540-73-8	year	6.25E-06	0.0012	6.00E-05
1,2-Diphenylhydrazine	122-66-7	year	0.004	0.768	0.0384
1,2-Epoxybutane	106-88-7	24-hr	20	0.11	0.00548
1,3-Butadiene	106-99-0	year	0.00588	1.13	0.0564
1,3-Dichloropropene	542-75-6	year	0.0625	12	0.6
1,3-Propane Sultone	1120-71-4	year	0.00145	0.278	0.0139
1,4-Dichlorobenzene	106-46-7	year	0.0909	17.4	0.872
1,4-Dioxane	123-91-1	year	0.13	24.9	1.25
1,6-Dinitropyrene	42397-64-8	year	9.09E-05	0.0174	0.000872
1,6-Hexamethylene diisocyanate	822-06-0	24-hr	0.07	0.000383	1.92E-05
1,8-Dinitropyrene	42397-65-9	year	0.000909	0.174	0.00872
1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinone	555-84-0	year	0.00196	0.376	0.0188
1-Amino-2-methylanthraquinone	82-28-0	year	0.0233	4.47	0.224
1-Chloro-1,1-difluoroethane	75-68-3	24-hr	5.00E+04	274	13.7
1-Nitropyrene	5522-43-0	year	0.00909	1.74	0.0872
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	year	5.26E-05	0.0101	0.000505
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	year	5.26E-05	0.0101	0.000505
2,3,3',4,4'-Tetrachlorobiphenyl	32598-14-4	year	0.000263	0.0505	0.00252
2,3,3',4,4',5,5'-Heptachlorobiphenyl	39635-31-9	year	0.000263	0.0505	0.00252
2',3,4,4',5-Pentachlorobiphenyl	65510-44-3	year	0.000263	0.0505	0.00252
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	year	0.000263	0.0505	0.00252
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	year	5.26E-05	0.0101	0.000505
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	year	2.63E-07	5.05E-05	2.52E-06
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	year	5.26E-08	1.01E-05	5.05E-07
2,3,7,8-Tetrachlorodibenzo-p-dioxin Related Compounds (TCDD)	C1746-01-6	year	2.63E-08	5.05E-06	2.52E-07
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	year	2.63E-07	5.05E-05	2.52E-06
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	year	2.63E-08	5.05E-06	2.52E-07
2,3',4,4',5,5'-Hexachlorobiphenyl	52663-72-6	year	0.000263	0.0505	0.00252
2,4,6-Trichlorophenol	88-06-2	year	0.05	9.59	0.48

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
2,4-Diaminoanisole	615-05-4	year	0.152	29.2	1.46
2,4-Diaminoanisole Sulfate	39156-41-7	year	0.27	51.8	2.59
2,4-Diaminotoluene	95-80-7	year	0.000909	0.174	0.00872
2,4-Dinitrotoluene	121-14-2	year	0.0112	2.15	0.107
2-Acetylaminofluorene	53-96-3	year	0.000769	0.148	0.00738
2-Amino-3-methyl-9H pyrido[2,3-b]indole	68006-83-7	year	0.00294	0.564	0.0282
2-Amino-3-methylimidazo-[4,5-f]quinoline	76180-96-6	year	0.0025	0.48	0.024
2-Amino-5-(5-Nitro-2-Furyl)-1,3, 4-Thiadiazol	712-68-5	year	0.000217	0.0416	0.00208
2-Aminoanthraquinone	117-79-3	year	0.106	20.3	1.02
2-Chloroacetophenone	532-27-4	24-hr	0.03	0.000164	8.21E-06
2-Ethoxyethanol	110-80-5	24-hr	70	0.383	0.0192
2-Methoxyethanol	109-86-4	24-hr	60	0.329	0.0164
2-Methyl-1-nitroanthraquinone	129-15-7	year	0.000833	0.16	0.00799
2-Methylphenol	95-48-7	24-hr	600	3.29	0.164
2-Naphthylamine	91-59-8	year	0.00196	0.376	0.0188
2-Nitrofluorene	607-57-8	year	0.0909	17.4	0.872
2-Nitropropane	79-46-9	24-hr	20	0.11	0.00548
3,3',4,4',5,5'-Tetrachlorobiphenyl	32774-16-6	year	0.000263	0.0505	0.00252
3,3',4,4',5-Pentachlorobiphenyl	57465-28-8	year	2.63E-07	5.05E-05	2.52E-06
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	year	0.000263	0.0505	0.00252
3,3'-Dichlorobenzidine	91-94-1	year	0.00294	0.564	0.0282
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	year	0.000263	0.0505	0.00252
3-Amino-9-ethylcarbazole hydrochloride	6109-97-3	year	0.0455	8.73	0.437
3-Chloro-2-methyl-propene	563-47-3	year	0.025	4.8	0.24
3-Methylcholanthrene	56-49-5	year	0.000159	0.0305	0.00153
3-Methylphenol	108-39-4	24-hr	600	3.29	0.164
4,4'-Diaminodiphenyl Ether	101-80-4	year	0.025	4.8	0.24
4,4-Methylene bis(2-chloroaniline)	101-14-4	year	0.00233	0.447	0.0224
4,4-Methylene bis(2-Methylaniline)	838-88-0	year	0.00385	0.739	0.0369
4,4'-Methylene bis(n,n'-dimethyl)aniline	101-61-1	year	0.0769	14.8	0.738
4,4'-Methylenedianiline	101-77-9	year	0.00217	0.416	0.0208
4,4-Methylenedianiline Dihydrochloride	13552-44-8	year	0.00294	0.564	0.0282
4,4-Thiodianiline	139-65-1	year	0.000233	0.0447	0.00224
4-Aminobiphenyl	92-67-1	year	0.000167	0.032	0.0016
4-Chloro-o-phenylenediamine	95-83-0	year	0.217	41.6	2.08
4-Dimethylaminoazobenzene	60-11-7	year	7.69E+04	1.48E+07	7.38E+05
4-Methylphenol	106-44-5	24-hr	600	3.29	0.164
4-Nitropyrene	57835-92-4	year	0.00909	1.74	0.0872
5-Methylchrysene	3697-24-3	year	0.000909	0.174	0.00872
5-Nitroacenaphthene	602-87-9	year	0.027	5.18	0.259
5-Nitro-o-Anisidine	99-59-2	year	0.0714	13.7	0.685
6-Nitrochrysene	7496-02-8	year	9.09E-05	0.0174	0.000872
7,12-Dimethylbenz[a]anthracene	57-97-6	year	1.41E-05	0.00271	0.000135
7h-Dibenzo[c,g]carbazole	194-59-2	year	0.000909	0.174	0.00872
A-alpha-c(2-amino-9h-pyrido[2,3-b]indole)	26148-68-5	year	0.00877	1.68	0.0841
Acetaldehyde	75-07-0	year	0.37	71	3.55
Acetamide	60-35-5	year	0.05	9.59	0.48
Acetonitrile	75-05-8	year	60	1.15E+04	576
Acrolein	107-02-8	24-hr	0.06	0.000329	1.64E-05
Acrylamide	79-06-1	year	0.000769	0.148	0.00738
Acrylic Acid	79-10-7	24-hr	1	0.00548	0.000274
Acrylonitrile	107-13-1	year	0.00345	0.662	0.0331

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Actinomycin D	50-76-0	year	4.00E-07	7.68E-05	3.84E-06
Alar	1596-84-5	year	0.196	37.6	1.88
Aldrin	309-00-2	year	0.000204	0.0391	0.00196
Allyl Chloride	107-05-1	year	0.167	32	1.6
alpha-Hexachlorocyclohexane	319-84-6	year	0.0013	0.249	0.0125
Amitrole	61-82-5	year	0.0037	0.71	0.0355
Ammonia	7664-41-7	24-hr	70.8	0.388	0.0194
Ammonium bisulfate	7803-63-6	1-hr	120	0.263	0.0131
Ammonium sulfate	7783-20-2	1-hr	120	0.263	0.0131
Aniline	62-53-3	year	0.625	120	6
Antimony Trioxide	1309-64-4	24-hr	0.2	0.0011	5.48E-05
Aramite	140-57-8	year	0.116	22.3	1.11
Arsenic & Inorganic Arsenic Compounds	C7440-38-2	year	0.000303	0.0581	0.00291
Arsine	7784-42-1	24-hr	0.05	0.000274	1.37E-05
Asbestos	1332-21-4	year	1.59E-05	0.00305	0.000153
Auramine	492-80-8	year	0.004	0.768	0.0384
Azaserine	115-02-6	year	0.000323	0.062	0.0031
Azathioprine	446-86-6	year	0.00196	0.376	0.0188
Azobenzene	103-33-3	year	0.0323	6.2	0.31
Barium Chromate	10294-40-3	year	1.49E-05	0.00286	0.000143
Benz[a]anthracene	56-55-3	year	0.00909	1.74	0.0872
Benzene	71-43-2	year	0.0345	6.62	0.331
Benzidine	92-87-5	year	7.14E-06	0.00137	6.85E-05
Benzo[a]pyrene	50-32-8	year	0.000909	0.174	0.00872
Benzo[b]fluoranthene	205-99-2	year	0.00909	1.74	0.0872
Benzo[j]fluoranthene	205-82-3	year	0.00909	1.74	0.0872
Benzo[k]fluoranthene	207-08-9	year	0.00909	1.74	0.0872
Benzyl Chloride	100-44-7	year	0.0204	3.91	0.196
Benzyl Violet 4B	1694-09-3	year	0.175	33.6	1.68
Beryllium & Compounds (NOS)	C7440-41-7	year	0.000417	0.08	0.004
Beryllium Oxide	1304-56-9	year	0.000417	0.08	0.004
Beryllium Sulfate	13510-49-1	year	1.16E-06	0.000223	1.11E-05
beta-Butyrolactone	3068-88-0	year	0.00345	0.662	0.0331
Beta-hexachlorocyclohexane	319-85-7	year	0.00233	0.447	0.0224
beta-Propiolactone	57-57-8	year	0.00025	0.048	0.0024
Bis(chloroethyl)ether	111-44-4	year	0.00141	0.271	0.0135
Bis(chloromethyl)ether	542-88-1	year	7.69E-05	0.0148	0.000738
Bromodichloromethane	75-27-4	year	0.027	5.18	0.259
Bromoform	75-25-2	year	0.909	174	8.72
Butylated hydroxyanisole	25013-16-5	year	17.5	3360	168
C.I. Basic Red 9 Monohydrochloride	569-61-9	year	0.0141	2.71	0.135
Cadmium & Compounds	7440-43-9	year	0.000238	0.0457	0.00228
Captafol	2425-06-1	year	0.0233	4.47	0.224
Captan	133-06-2	year	1.52	292	14.6
Carbon disulfide	75-15-0	24-hr	800	4.38	0.219
Carbon monoxide	630-08-0	1-hr	2.30E+04	50.4	2.52
Carbon Tetrachloride	56-23-5	year	0.0238	4.57	0.228
Chlorambucil	305-03-3	year	7.69E-06	0.00148	7.38E-05
Chlordane	57-74-9	year	0.00294	0.564	0.0282
Chlordecone	143-50-0	year	0.000217	0.0416	0.00208
Chlorendic Acid	115-28-6	year	0.0385	7.39	0.369
Chlorinated Paraffins	108171-26-2	year	0.04	7.68	0.384

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Chlorine	7782-50-5	24-hr	0.2	0.0011	5.48E-05
Chlorine dioxide	10049-04-4	24-hr	0.2	0.0011	5.48E-05
Chlorobenzene	108-90-7	24-hr	1000	5.48	0.274
Chlorobenzilate	510-15-6	year	0.0323	6.2	0.31
Chlorodifluoromethane	75-45-6	24-hr	5.00E+04	274	13.7
Chloroform	67-66-3	year	0.0435	8.35	0.417
Chloromethyl methyl ether	107-30-2	year	0.00145	0.278	0.0139
Chloropicrin	76-06-2	24-hr	0.4	0.00219	0.00011
Chlorothalonil	1897-45-6	year	1.12	215	10.7
Chlorozotocin	54749-90-5	year	1.45E-05	0.00278	0.000139
Chromic Acid	11115-74-5	year	1.51E-05	0.0029	0.000145
Chromic Trioxide	1333-82-0	year	1.28E-05	0.00246	0.000123
Chromic(VI) Acid	7738-94-5	year	1.51E-05	0.0029	0.000145
Chromium Hexavalent: Soluble, except Chromic Trioxide	C7440-47-3	year	6.67E-06	0.00128	6.40E-05
Chromium(VI)	18540-29-9	year	6.67E-06	0.00128	6.40E-05
Chrysene	218-01-9	year	0.0909	17.4	0.872
Cinnamyl Anthranilate	87-29-6	year	0.769	148	7.38
Cobalt	7440-48-4	24-hr	0.1	0.000548	2.74E-05
Coke Oven Emissions	8007-45-2	year	0.00162	0.311	0.0155
Copper & Compounds	C7440-50-8	1-hr	100	0.219	0.011
Cumene	98-82-8	24-hr	400	2.19	0.11
Cupferron	135-20-6	year	0.0159	3.05	0.153
Cyclohexane	110-82-7	24-hr	6000	32.9	1.64
Cyclophosphamide (anhydrous)	50-18-0	year	0.00588	1.13	0.0564
Cyclophosphamide (Hydrated)	6055-19-2	year	0.00625	1.2	0.06
D & C Red No. 9	5160-02-1	year	0.667	128	6.4
Dacarbazine	4342-03-4	year	7.14E-05	0.0137	0.000685
Dantron	117-10-2	year	0.0455	8.73	0.437
DDD	72-54-8	year	0.0145	2.78	0.139
DDE	72-55-9	year	0.0103	1.98	0.0988
DDT	50-29-3	year	0.0103	1.98	0.0988
Di(2-ethylhexyl)phthalate	117-81-7	year	0.0417	8	0.4
Diazinon	333-41-5	24-hr	9	0.0493	0.00246
Dibenz[a,h]acridine	226-36-8	year	0.00909	1.74	0.0872
Dibenz[a,h]anthracene	53-70-3	year	0.000833	0.16	0.00799
Dibenz[a,j]acridine	224-42-0	year	0.00909	1.74	0.0872
Dibenzo[a,e]pyrene	192-65-4	year	0.000909	0.174	0.00872
Dibenzo[a,h]pyrene	189-64-0	year	9.09E-05	0.0174	0.000872
Dibenzo[a,i]pyrene	189-55-9	year	9.09E-05	0.0174	0.000872
Dibenzo[a,l]pyrene	191-30-0	year	9.09E-05	0.0174	0.000872
Dibromochloromethane	124-48-1	year	0.037	7.1	0.355
Dichloromethane	75-09-2	year	1	192	9.59
Dichlorvos	62-73-7	year	0.012	2.3	0.115
Dieldrin	60-57-1	year	0.000217	0.0416	0.00208
Diesel Engine Exhaust, Particulate	CAS-NA-1	year	0.00333	0.639	0.032
Diethanolamine	111-42-2	24-hr	3	0.0164	0.000821
Diethyl mercury	627-44-1	24-hr	0	0.00E+00	0.00E+00
Diethylstilbestrol	56-53-1	year	1.00E-05	0.00192	9.59E-05
Diglycidyl Resorcinol Ether	101-90-6	year	0.00204	0.391	0.0196
Dihydrosafrole	94-58-6	year	0.0769	14.8	0.738
Dimethyl Mercury	593-74-8	24-hr	0	0.00E+00	0.00E+00
Dimethylcarbamoyl Chloride	79-44-7	year	0.00027	0.0518	0.00259

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Dimethylvinylchloride	513-37-1	year	7.69	1480	73.8
Direct Black 38	1937-37-7	year	4.76E+04	9.13E+06	4.57E+05
Direct Blue 6	2602-46-2	year	0.000476	0.0913	0.00457
Direct Brown 95	16071-86-6	year	0.000526	0.101	0.00505
Disperse Blue 1	2475-45-8	year	0.769	148	7.38
Disulfoton	298-04-4	24-hr	6	0.0329	0.00164
Epichlorohydrin	106-89-8	year	0.0435	8.35	0.417
Estradiol 17b	50-28-2	year	9.09E-05	0.0174	0.000872
Ethyl Carbamate	51-79-6	year	0.00345	0.662	0.0331
Ethyl Chloride	75-00-3	24-hr	3.00E+04	164	8.21
Ethylbenzene	100-41-4	year	0.4	76.8	3.84
Ethylene Glycol	107-21-1	24-hr	400	2.19	0.11
Ethylene glycol monobutyl ether	111-76-2	24-hr	1.30E+04	71.2	3.56
Ethylene glycol monoethyl ether acetate	111-15-9	24-hr	300	1.64	0.0821
Ethylene glycol monomethyl ether acetate	110-49-6	24-hr	90	0.493	0.0246
Ethylene oxide	75-21-8	year	0.0114	2.19	0.109
Ethylene Thiourea	96-45-7	year	0.0769	14.8	0.738
Ethyleneimine	151-56-4	year	5.26E-05	0.0101	0.000505
Ferric Sulfate	10028-22-5	1-hr	120	0.263	0.0131
Fluoride	16984-48-8	24-hr	13	0.0712	0.00356
Fluorine (soluble Fluoride)	7782-41-4	24-hr	15.8	0.0866	0.00433
Formaldehyde	50-00-0	year	0.167	32	1.6
Furmecyclox	60568-05-0	year	0.116	22.3	1.11
Furylfuramide	3688-53-7	year	0.0145	2.78	0.139
gamma-Hexachlorocyclohexane	58-89-9	year	0.00323	0.62	0.031
Glu-P-1	67730-11-4	year	0.000714	0.137	0.00685
Glu-P-2	67730-10-3	year	0.0025	0.48	0.024
Glutaraldehyde	111-30-8	24-hr	0.08	0.000438	2.19E-05
Gyromitrin	16568-02-8	year	0.000345	0.0662	0.00331
HC Blue 1	2784-94-3	year	0.0667	12.8	0.64
Heptachlor	76-44-8	year	7.69E-05	0.0148	0.000738
Heptachlor epoxide	1024-57-3	year	0.000385	0.0739	0.00369
Heptachlorodibenzo-p-dioxins	37871-00-4	year	2.63E-06	0.000505	2.52E-05
Hexachlorobenzene	118-74-1	year	0.00196	0.376	0.0188
Hexachlorobutadiene	87-68-3	year	0.0455	8.73	0.437
Hexachlorocyclohexane	608-73-1	year	0.000909	0.174	0.00872
Hexachlorocyclopentadiene	77-47-4	24-hr	0.2	0.0011	5.48E-05
Hexachlorodibenzo-p-Dioxins, Total	34465-46-8	year	2.63E-07	5.05E-05	2.52E-06
Hexachloroethane	67-72-1	year	0.0909	17.4	0.872
Hydrazine	302-01-2	year	0.000204	0.0391	0.00196
Hydrazine Sulfate	10034-93-2	year	0.00116	0.223	0.0111
Hydrogen chloride	7647-01-0	24-hr	9	0.0493	0.00246
Hydrogen Cyanide	74-90-8	24-hr	9	0.0493	0.00246
Hydrogen Fluoride	7664-39-3	24-hr	14	0.0767	0.00383
Hydrogen Selenide	7783-07-5	1-hr	5	0.011	0.000548
Hydrogen Sulfide	7783-06-4	24-hr	2	0.011	0.000548
Indeno[1,2,3-cd]pyrene	193-39-5	year	0.00909	1.74	0.0872
Isophorone	78-59-1	24-hr	2000	11	0.548
Isopropyl Alcohol	67-63-0	1-hr	3200	7.01	0.35
Lasiocarpine	303-34-4	year	0.000455	0.0873	0.00437
Lead & Compounds (NOS)	C7439-92-1	year	0.0833	16	0.799
Lead Acetate	301-04-2	year	0.0125	2.4	0.12

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Lead Chromate	7758-97-6	year	4.14E-05	0.00794	0.000397
Lead Chromate Oxide	18454-12-1	year	7.01E-05	0.0135	0.000673
Lead Subacetate	1335-32-6	year	0.0909	17.4	0.872
Maleic Anhydride	108-31-6	24-hr	0.7	0.00383	0.000192
Manganese & Compounds	C7439-96-5	24-hr	0.04	0.000219	1.10E-05
Melphalan	148-82-3	year	2.70E-05	0.00518	0.000259
Melphalan HCl	3223-07-2	year	2.70E-05	0.00518	0.000259
Mercury, Elemental	7439-97-6	24-hr	0.09	0.000493	2.46E-05
Methyl Alcohol	67-56-1	24-hr	4000	21.9	1.1
Methyl Bromide	74-83-9	24-hr	5	0.0274	0.00137
Methyl Chloride	74-87-3	24-hr	90	0.493	0.0246
Methyl Ethyl Ketone	78-93-3	24-hr	5000	27.4	1.37
Methyl Isobutyl Ketone	108-10-1	24-hr	3000	16.4	0.821
Methyl Isocyanate	624-83-9	24-hr	1	0.00548	0.000274
Methyl methacrylate	80-62-6	24-hr	700	3.83	0.192
Methyl Methanesulfonate	66-27-3	year	0.0357	6.85	0.343
Methyl Tertiary Butyl Ether	1634-04-4	year	3.85	739	36.9
Methylene diphenyl isocyanate	101-68-8	24-hr	0.7	0.00383	0.000192
Methylthiouracil	56-04-2	year	0.00909	1.74	0.0872
Michler's ketone	90-94-8	year	0.004	0.768	0.0384
Mirex	2385-85-5	year	0.000196	0.0376	0.00188
Mitomycin C	50-07-7	year	4.35E-07	8.35E-05	4.17E-06
Monocrotaline	315-22-0	year	0.000345	0.0662	0.00331
m-Xylene	108-38-3	24-hr	221	1.21	0.0605
n,n-Dimethylformamide	68-12-2	24-hr	80	0.438	0.0219
n-[4-(5-nitro-2-furyl)-2-thiazolyl]-acetamide	531-82-8	year	0.00233	0.447	0.0224
Naphthalene	91-20-3	year	0.0294	5.64	0.282
n-Hexane	110-54-3	24-hr	700	3.83	0.192
Nickel Refinery Dust	C7440-02-0	year	0.0042	0.806	0.0403
Nickel Subsulfide	12035-72-2	year	0.00204	0.391	0.0196
Nifurthiazole	3570-75-0	year	0.00152	0.292	0.0146
Nitric Acid	7697-37-2	1-hr	86	0.188	0.00942
Nitrilotriacetic acid	139-13-9	year	0.667	128	6.4
Nitrilotriacetic acid, trisodium salt monohydrate	18662-53-8	year	0.345	66.2	3.31
Nitrofen	1836-75-5	year	0.0435	8.35	0.417
Nitrofurazone	59-87-0	year	0.0027	0.518	0.0259
Nitrogen dioxide	10102-44-0	1-hr	470	1.03	0.0515
n-Methyl-n-nitro-n-nitrosoguanidine	70-25-7	year	0.000417	0.08	0.004
n-Nitrosodiethanolamine	1116-54-7	year	0.00125	0.24	0.012
n-Nitrosodiethylamine	55-18-5	year	1.00E-04	0.0192	0.000959
n-Nitrosodimethylamine	62-75-9	year	0.000217	0.0416	0.00208
n-Nitroso-di-n-butylamine	924-16-3	year	0.000323	0.062	0.0031
n-Nitrosodi-n-propylamine	621-64-7	year	0.0005	0.0959	0.0048
n-Nitrosodiphenylamine	86-30-6	year	0.385	73.9	3.69
n-Nitrosomorpholine	59-89-2	year	0.000526	0.101	0.00505
n-Nitroso-n-ethylurea	759-73-9	year	0.00013	0.0249	0.00125
n-Nitroso-n-methylethylamine	10595-95-6	year	0.000159	0.0305	0.00153
n-Nitroso-n-methylurea	684-93-5	year	2.94E-05	0.00564	0.000282
n-Nitroso-n-Methylurethane	615-53-2	year	3.23E-05	0.0062	0.00031
n-Nitrosonornicotine	16543-55-8	year	0.0025	0.48	0.024
n-Nitrosopiperidine	100-75-4	year	0.00037	0.071	0.00355
n-Nitrosopyrrolidine	930-55-2	year	0.00167	0.32	0.016

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o-Anisidine	90-04-0	year	0.025	4.8	0.24
o-Anisidine Hydrochloride	134-29-2	year	0.0323	6.2	0.31
o-Phenylphenate, Sodium	132-27-4	year	1.16	223	11.1
ortho-Aminoazotoluene	97-56-3	year	0.000909	0.174	0.00872
o-Toluidine	95-53-4	year	0.0196	3.76	0.188
o-Toluidine Hydrochloride	636-21-5	year	0.027	5.18	0.259
o-Xylene	95-47-6	24-hr	221	1.21	0.0605
Ozone	10028-15-6	1-hr	180	0.394	0.0197
para-Cresidine	120-71-8	year	0.0233	4.47	0.224
p-Chloro-o-toluidine	95-69-2	year	0.013	2.49	0.125
Pentabromodiphenyl Ether	32534-81-9	24-hr	6	0.0329	0.00164
Pentachlorophenol	87-86-5	year	0.217	41.6	2.08
Perchloroethylene	127-18-4	year	0.169	32.4	1.62
Phenacetin	62-44-2	year	1.59	305	15.3
Phenazopyridine	94-78-0	year	0.0204	3.91	0.196
Phenazopyridine hydrochloride	136-40-3	year	0.0233	4.47	0.224
Phenesterin	3546-10-9	year	2.33E-05	0.00447	0.000224
Phenobarbital	50-06-6	year	0.00769	1.48	0.0738
Phenol	108-95-2	24-hr	200	1.1	0.0548
Phenoxybenzamine	59-96-1	year	0.00112	0.215	0.0107
Phenoxybenzamine hydrochloride	63-92-3	year	0.0013	0.249	0.0125
Phosgene	75-44-5	24-hr	0.3	0.00164	8.21E-05
Phosphine	7803-51-2	24-hr	0.8	0.00438	0.000219
Phosphoric Acid	7664-38-2	24-hr	7	0.0383	0.00192
Phosphorus	7723-14-0	24-hr	20	0.11	0.00548
Phthalic Anhydride	85-44-9	24-hr	20	0.11	0.00548
p-Nitrosodiphenylamine	156-10-5	year	0.159	30.5	1.53
Polybrominated Biphenyls	CAS-NA-2	year	0.000116	0.0223	0.00111
Polychlorinated Biphenyls	1336-36-3	year	0.00175	0.336	0.0168
Ponceau 3R	3564-09-8	year	0.217	41.6	2.08
Ponceau MX	3761-53-3	year	0.769	148	7.38
Potassium Bromate	7758-01-2	year	0.00714	1.37	0.0685
Procarbazine	671-16-9	year	0.00025	0.048	0.0024
Procarbazine Hydrochloride	366-70-1	year	0.000294	0.0564	0.00282
Propylene	115-07-1	24-hr	3000	16.4	0.821
Propylene Glycol	57-55-6	24-hr	28.5	0.156	0.0078
Propylene Glycol Dinitrate	6423-43-4	24-hr	0.276	0.00151	7.56E-05
Propylene glycol monomethyl ether	107-98-2	24-hr	7000	38.3	1.92
Propylene oxide	75-56-9	year	0.27	51.8	2.59
Propylthiouracil	51-52-5	year	0.00345	0.662	0.0331
p-Xylene	106-42-3	24-hr	221	1.21	0.0605
Refractory Ceramic Fibers	CAS-NA-3	24-hr	0.03	0.000164	8.21E-06
Reserpine	50-55-5	year	0.000323	0.062	0.0031
Safrole	94-59-7	year	0.0159	3.05	0.153
Selenium & Selenium Compounds (other than Hydrogen Selenide)	C7782-49-2	24-hr	20	0.11	0.00548
Short-chain (C10-13) chlorinated paraffins	85535-84-8	year	0.04	7.68	0.384
Silica (crystalline, Respirable)	7631-86-9	24-hr	3	0.0164	0.000821
Sodium Hydroxide	1310-73-2	1-hr	8	0.0175	0.000876
Sodium Sulfate	7757-82-6	1-hr	120	0.263	0.0131
Sterigmatocystin	10048-13-2	year	1.00E-04	0.0192	0.000959
Streptozotocin	18883-66-4	year	3.23E-05	0.0062	0.00031
Styrene	100-42-5	24-hr	900	4.93	0.246

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Styrene Oxide	96-09-3	year	0.0217	4.16	0.208
Sulfallate	95-06-7	year	0.0185	3.55	0.178
Sulfur dioxide	7446-09-5	24-hr	26.7	0.146	0.0073
Sulfur Mustard	505-60-2	24-hr	0.7	0.00383	0.000192
Sulfuric Acid	7664-93-9	24-hr	1	0.00548	0.000274
Tetrabromodiphenyl Ether	40088-47-9	24-hr	6	0.0329	0.00164
Thioacetamide	62-55-5	year	0.000588	0.113	0.00564
Thiourea	62-56-6	year	0.0476	9.13	0.457
Titanium Tetrachloride	7550-45-0	24-hr	0.1	0.000548	2.74E-05
Toluene	108-88-3	24-hr	5000	27.4	1.37
Toluene-diisocyanates	26471-62-5	24-hr	0.07	0.000383	1.92E-05
Toluene-2,4-diisocyanate	584-84-9	24-hr	0.07	0.000383	1.92E-05
Toluene-2,6-diisocyanate	91-08-7	24-hr	0.07	0.000383	1.92E-05
Toxaphene	8001-35-2	year	0.00294	0.564	0.0282
Trans-1,2-dichloroethene	156-60-5	24-hr	807	4.42	0.221
Trans-2[(dimethylamino)-methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole	55738-54-0	year	0.00769	1.48	0.0738
Trichloroethylene	79-01-6	year	0.5	95.9	4.8
Triethylamine	121-44-8	24-hr	200	1.1	0.0548
Tris-(1-Aziridinyl)phosphine sulfide	52-24-4	year	0.000294	0.0564	0.00282
Tris(2,3-dibromopropyl)phosphate	126-72-7	year	0.00152	0.292	0.0146
Tryptophan-P-1	62450-06-0	year	0.000135	0.0259	0.0013
Tryptophan-P-2	62450-07-1	year	0.0011	0.211	0.0106
Vanadium	7440-62-2	24-hr	0.2	0.0011	5.48E-05
Vanadium Pentoxide	1314-62-1	1-hr	30	0.0657	0.00329
Vinyl acetate	108-05-4	24-hr	200	1.1	0.0548
Vinyl Bromide	593-60-2	24-hr	3	0.0164	0.000821
Vinyl Chloride	75-01-4	year	0.0128	2.46	0.123

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 173-460-110	Acceptable source impact levels.
WAC 173-460-120	Scientific review and amendment of acceptable source impact levels and lists.
WAC 173-460-130	Fees.
WAC 173-460-160	Class B toxic air pollutants and acceptable source impact levels.